

**WHAT IS CLAIMED:**

1. A method for processing a print job, comprising:  
constructing a display list with a plurality of objects; and  
5 replacing two or more sequential said objects with a new object.
2. The method of claim 1, wherein said replacing further includes constructing a masked indexed image.
- 10 3. The method of claim 2, further including constructing a look up table corresponding to values of said masked indexed image.
4. The method of claim 1, further including determining whether said two or more sequential objects are opaque.
- 15 5. The method of claim 1, further including determining whether said two or more sequential objects have regions in the form of a stencil.
6. The method of claim 5, further including determining whether said two or more  
20 sequential objects have a single color in said stencil.
7. The method of claim 1, further including determining whether said two or more sequential objects have similar color intensities.
- 25 8. The method of claim 1, further including determining whether said two or more sequential objects have a same halftone screen.
9. A method for processing a print job, comprising:  
constructing a display list with a plurality of objects;  
30 determining whether two or more sequential said objects are combinable; and  
replacing said two or more sequential said objects with a masked indexed image.

10. The method of claim 9, further including constructing a look up table corresponding to values of said masked indexed image.

5 11. The method of claim 9, further including converting said masked indexed image to a uni-dimensional masked indexed image.

12. The method of claim 11, further including providing a scalar value for said uni-dimensional masked indexed image.

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13. The method of claim 9, further including constructing said masked indexed image with a region attribute substantially conforming to a merger of bounding boxes corresponding to said two or more sequential said objects.

15 14. The method of claim 9, wherein said determining further includes setting a head pointer to one of said two or more sequential said objects and setting a tail pointer to another of said two or more sequential said objects.

15. A computer readable media having computer executable instructions for performing  
20 the steps recited in claim 9.

16. A printer having a graphics engine with computer executable instructions stored in a memory accessible by the graphics engine for performing the steps recited in claim 9.

25 17. A method for processing a PDL print job in a printer, said PDL print job having at least two to-be-printed objects, comprising:

receiving an indication that said at least two to-be-printed objects have been presented;

constructing a display list having two sequentially arranged display list objects

30 thereon, said display list objects corresponding to said at least two to-be-printed objects;

determining whether said display list objects are combinable;

replacing said display list objects with a masked indexed image; and  
constructing a look up table having entries corresponding to values of said  
masked indexed image.

5 18. The method of claim 17, wherein said determining further includes examining  
whether said display list objects are one of opaque, have regions in a stencil form, have  
similar color intensities, have a same halftone screen, have bounding box sizes beneath a  
desired size, have bounding boxes in proximity to one another, and have no more  
different colors than a maximum number of colors an index allows.

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19. The method of claim 17, wherein said determining further includes setting a head  
pointer to one of said display list objects and setting a tail pointer to another of said  
display list objects.

15 20. The method of claim 17, further including constructing said masked indexed image  
with a region attribute substantially conforming to a merger of bounding boxes  
corresponding to said two sequential arranged display list objects.

21. The method of claim 17, further including converting said masked indexed image to  
20 a uni-dimensional masked indexed image and providing a scalar value therefor.

22. A method for processing a print job, comprising:

constructing a display list with a plurality of objects; and

25 constructing a bounding box for two or more sequential said objects for replacing  
said two or more sequential said objects with a new object, said bounding box having a  
region boundary therein masking a merged boundary of said two or more sequential said  
objects.

23. A method for processing a print job, comprising:

30 constructing a display list with a plurality of objects; and

constructing a bounding box about two or more sequential said objects for replacing said two or more sequential said objects with a new object, said bounding box having a plurality of indexed image values, one of said indexed image values being used to represent an area outside a union of said two or more sequential said objects of said

5 bounding box.